

VALGUSTID. OSA 2-20: ERINÕUDED. VALGUSKETID

Luminaires - Part 2-20: Particular requirements -
Lighting chains

EESTI STANDARDI EESSÕNA

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English Version

Luminaires -
Part 2-20: Particular requirements - Lighting chains
(IEC 60598-2-20:2014)

Luminaires -
Partie 2-20: Exigences particulières - Guirlandes
lumineuses
(IEC 60598-2-20:2014)

Leuchten -
Teil 2-20: Besondere Anforderungen - Lichterketten
(IEC 60598-2-20:2014)

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Foreword

The text of document 34D/1145/FDIS, future edition 4 of IEC 60598-2-20, prepared by SC 34D "Luminaires" of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60598-2-20:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-09-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-12-30

This document supersedes EN 60598-2-20:2010.

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This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60598-2-20:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60598-2-21 NOTE Harmonized as EN 60598-2-21.

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LUMINAIRES –

Part 2-20: Particular requirements – Lighting chains

20.1 Scope

This part of IEC 60598 specifies requirements for lighting chains fitted with series, parallel or a combination of series/parallel connected light sources for use either indoors or outdoors on supply voltages not exceeding 250 V.

For combinations where rope lights (also known as sealed lighting chains) are included, see IEC 60598-2-21.

Lighting chains provided with fixed or detachable attachments e.g. ornamental or decorative, are considered to be covered by this standard.

For lighting chains fitted with lampholders of the push-in type, the appropriate requirements of this standard applies.

NOTE 1 A Christmas tree lighting chain is an example of a lighting chain fitted with series or series/parallel connected lamps. A chain for illuminating ski-tracks or promenades is an example of a lighting chain fitted with parallel connected lamps.

For lighting chains with non-standardised lamps (e.g. lamps of the push-in type) the lamps are regarded as a part of the lighting chain and consequently included in the testing.

NOTE 2 For products where the lighting chain is permanently fixed to a frame or pre-lit Christmas tree the relevant clauses of IEC 60598-2-4 and/or IEC 60598-2-7 can also apply.

NOTE 3 In some countries the term "strings" is used instead of "chains".

NOTE 4 Candlestick luminaires are tested according to IEC 60598-2-4.

20.2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60227-5:2011, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 5: Flexible cables (cords)*

IEC 60238, *Edison screw lampholders*

IEC 60245-4:2011, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 4: Cords and flexible cables*

IEC 60320 (all parts), *Appliance couplers for household and similar general purposes*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60598-1, *Luminaires – Part 1: General requirements and tests*

IEC 60906 (all parts), *IEC System of plugs and socket-outlets for household and similar purposes*

IEC 61184, *Bayonet lampholders*

IEC 61347-2-11, *Lamp controlgear – Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires*

IEC 61347-2-13, *Lamp controlgear – Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules*

IEC 61984:2008, *Connectors – Safety requirements and tests*

ISO 4046-4:2002, *Paper, board, pulps and related terms – Vocabulary – Part 4: Paper and board grades and converted products*

20.3 Terms and definitions

For the purpose of this document, the terms and definitions given in IEC 60598-1 as well as the following apply.

20.3.1 lighting chain

luminaire comprising an assembly of series-connected lamps, parallel-connected lamps or series/parallel-connected lamps and interconnecting insulated conductors

Note 1 to entry: For lighting chains with non-standardised lamps (e.g. lamps of the push-in type) the lamps are regarded as part of the chain.

Note 2 to entry: For lighting chains with non-removable lamps, the lamps are regarded as part of the chain.

Note 3 to entry: A lighting chain may incorporate control devices (e.g. flasher units, see 20.7.8).

Note 4 to entry: Unless otherwise stated, references to lamps within this standard also refer to LEDs.

20.3.2 rope light sealed lighting chain

lighting chain with non-replaceable light sources enclosed in a rigid or flexible insulating translucent pipe or tube, sealed at the ends, with or without joints

Note 1 to entry: Covered by IEC 60598-2-21.

20.4 General test requirements

The provisions of Section 0 of IEC 60598-1 apply. The tests described in each appropriate section of IEC 60598-1 shall be carried out in the order listed in this part of IEC 60598.

20.5 Classification of luminaires

20.5.1 General

Lighting chains shall be classified in accordance with the provisions of Section 2 of IEC 60598-1 together with the requirements of 20.5.2 and 20.5.3.

20.5.2 Protection against electric shock

Lighting chains shall be classified as Class II or Class III.